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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/684,093

10/10/2003

Richard L. Duncan

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12/16/2004

DUANE MORRIS, LLP

IP DEPARTMENT

ONE LIBERTY PLACE

PHILADELPHIA, PA 19103-7396

EXAMINER

LUU, AN T

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/684,093

Applicant(s)

DUNCAN, RICHARD L.

Examiner

An T. Luu

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-19 is/are allowed.
- 6) ☒ Claim(s) 1,2,20 and 21 is/are rejected.
- 7) ☒ Claim(s) 3-11 and 22-28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4-9-04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2 and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by the Bloch et al reference (U.S. Patent (5,923,193)).

Block discloses in figure 1 an apparatus for prohibiting signals traveling from a first clock domain 160 operating with a first clock A to a second clock domain 180 operating with a second clock B when the first clock is not active, the synchronizing circuit comprising at least one signal receiving module 160 for receiving at least one selected signal DATA2 in the first clock domain; a detection circuit 110 producing a detection signal C indicating that the first

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clock is active (i.e., detecting changes in phases); and at least one output selection module 180 for passing the selected signal from the first clock domain to the second clock domain only when the first clock is active as required by claim 1. It is noted that DATA2 cannot reach to FF 170 when the first clock A is not active.

As to claim 2, column 5, lines 2-3, discloses element 160 being a conventional flip-flop. Therefore, FF 160 receives the selected signal DATA2 upon a triggering of the first clock A.

As to claims 20-21, they are rejected for reciting methods derived from the apparatus described in claims 1-2 as noted above. The limitation “*prohibiting the selected signal from the first clock domain to be synchronized with the second clock when the first clock is detected to be inactive*” of claim 20 is met by the fact that DATA2 cannot reach to FF 170 when the first clock A is not active.

Allowable Subject Matter

4. Claims 12-19 are allowed.
5. Claims 3-11 and 22-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to disclose an apparatus and/or methods thereof comprising elements and/or steps as recited in claims. Specifically, none of the prior art teaches or fairly suggests, among other things, the following limitations:

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- The output selection module includes a first flip-flop receiving the selected signal from the first clock domain upon a triggering of a gated clock generated by a gated clock module as required by claims 3 and 22.
- The detection circuit further includes two or more flip-flops arranged in series that are synchronized with the first clock as required by claim 5.
- A disable circuit for disabling the detection signal when the first clock becomes inactive as required by claims 8 and 25.
- A signal passing module passing the output of the first latch to generate a gated clock signal that is synchronized with the second clock; and an output selection module for passing the selected input signal upon a triggering of the gated clock signal as required by claim 12.
- The detecting further includes detecting whether the first clock is inactive by feeding a constant input to at least one flip-flop that is synchronized with the first clock as required by claim 24.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

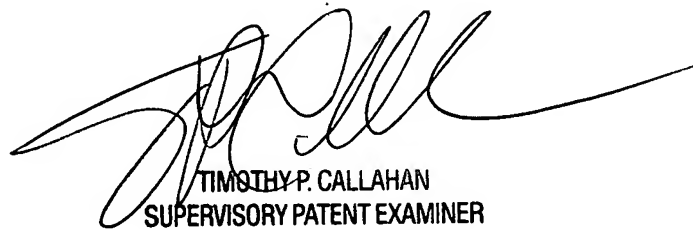
Any inquiry concerning this communication or earlier communications from the examiner should be directed to An T. Luu whose telephone number is 571-272-1746. The examiner can normally be reached on 7:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

An T. Luu
12-02-04 *ATL*



TIMOTHY P. CALLAHAN
SUPERVISORY PATENT EXAMINER
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